

Listing and Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

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1. (currently amended) An interface for connecting networks, comprising: an interworking function provided between a wireless local area network (WLAN) and a public mobile land network (PLMN) to provide communication interactions between the public mobile land network and the wireless local area

10 network;

the interworking function further comprising a dual-protocol stack which interfaces the wireless local area network protocols and public mobile land network protocols to provide seamless communications between the wireless local area network and the public mobile land network such that an increase in available service bandwidth provided for users of the public mobile land network is maintained,

wherein detection of user movement between a coverage area of said wireless local area network and a coverage area of said public mobile land network is accomplished by comparing a first routing area identifier (RAI) associated with said public mobile land network and a second routing area identifier (RAI) associated with said wireless local area network.

2. (original) The interface as recited in claim 1, wherein the interworking function is present within the wireless local area network.

3. (previously presented) The interface as recited in claim 1, wherein the public mobile land network includes one of a universal mobile telecommunications system (UMTS) or a general packet radio service (GPRS) system.

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4. (original) The interface as recited in claim 1, wherein the interworking function communicates between the wireless local area network and the public mobile land network through a Gn interface.

10 5. (original) The interface as recited in claim 1, wherein the seamless communications include protocol compatibility between the wireless local area network and the public mobile land network.

15 6. (previously presented) The interface as recited in claim 1, wherein the interworking function functions as a logical serving general packet radio service (GPRS) support node (SGSN).

20 7. (original) The interface as recited in claim 6, wherein the interworking function is viewed by the public mobile land network as a logical serving general packet radio service support node within its own network.

25 8. (original) The interface as recited in claim 6, wherein the interworking function is viewed as a node within the wireless local area network by the wireless local area network when receiving information from the public mobile land network.

9. (previously presented) The interface as recited in claim 1, wherein the interworking function is coupled to a gateway general packet radio service support node (GGSN) via a gateway tunneling protocol (GTP) tunnel.

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10. (original) The interface as recited in claim 1, wherein the protocol stack

includes a user plane stack.

11. (original) The interface as recited in claim 1, wherein the protocol stack includes a control plane stack.

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12. (previously presented) The interface as recited in claim 1, wherein the public mobile land network includes session management general packet radio service mobility management (GMM) procedures which are reused in the wireless local area network due to the use of an adaptation layer in a mobile

10 dual-protocol stack and in the interworking function to wireless local area network interface to mimic the functionality of a radio resource control (RRC) protocol sublayer.

15 13. (currently amended) The interface as recited in claim 1, wherein the wireless local area network works with any serving general packet radio service (GPRS) or code division multiple access (CDMA) system.

14. (currently amended) A method for interfacing two wireless networks, comprising the steps of:

20 connecting a wireless local area network (WLAN) to a universal mobile telecommunications system (UMTS) network through an intra public mobile land network (PLMN) interface; and

interfacing the wireless local area network to the universal mobile telecommunications system network by providing interfaces towards the

25 universal mobile telecommunications system and the wireless local area network using an interworking function such that communications received from the wireless local area network appear to be from a different serving general packet radio service (GPRS) support node (SGSN) and communications sent to the wireless local area network appear to be from

30 within the wireless local area network, and

detecting user movement between a coverage area of said wireless

local area network and a coverage area of said public mobile land network by comparing a first routing area identifier (RAI) associated with said public mobile land network and a second routing area identifier (RAI) associated with said wireless local area network.

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15. (previously presented) The method as recited in claim 14, wherein the interworking function communicates with a serving general packet radio service (GPRS) support node (SGSN) of the universal mobile telecommunications system network through a Gn interface.

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16. (original) The method as recited in claim 14, wherein the interworking function creates seamless interactions between the universal mobile telecommunications system network and wireless local area network by ensuring protocol compatibility between the wireless local area network and the 15 universal mobile telecommunications system network.

17. (previously presented) The method as recited in claim 14, wherein the interworking function functions as a logical serving general packet radio service (GPRS) support node (SGSN).

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18. (original) The method as recited in claim 14, further comprising the step of viewing the interworking function as a logical serving general packet radio service support node from a same public mobile land network.